Coaxial

Bandpass Filter

SBP-35A+

50Ω 30 to 40 MHz

Generic photo used for illustration purposes only

CASE STYLE: FF99

The Big Deal

- Excellent rejection
- Narrow bandwidth
- Good VSWR (1.2:1 typical)
- Fast roll-off
- Connectorized package

Product Overview

SBP-35A+ is a 50Ω bandpass filter in a connectorized package. This bandpass filter covers from 30 to 40 MHz, these units offer good matching within the passband and high rejection. This unit uses a miniature high Q capacitors and wire welded inductors for high reliability. It has repeatable performance across production lots and consistent performance across temperature.

Key Features

Feature	Advantages
Excellent rejection	This enables the filter attenuate spurious signals and reject harmonics for broad frequency band.
Good VSWR, 1.2:1 typical over passband	This provides well matched input and output ports.
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.

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Connectors	Model
SMA	SBP-35A+

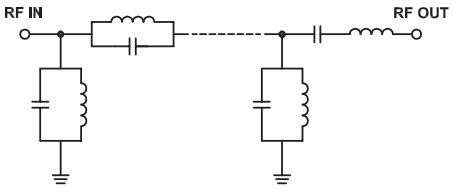
Features

- Excellent rejection
- Good VSWR, 1.2:1 typical @ passband
- Connectorized package

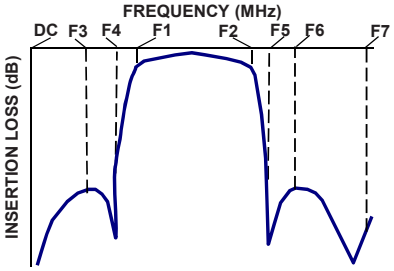
Applications

- FM Radio rejection
- Receivers / Transmitters
- Professional mobile radio / Public Access mobile radio (PMR/ PAMR)

Functional Schematic



Typical Frequency Response



+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications at 25°C

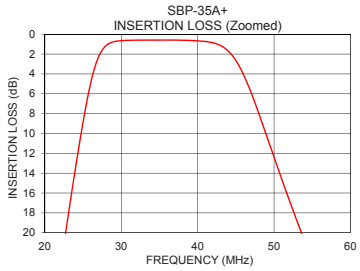
Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	35	-	MHz
	Insertion Loss	F1-F2	30 - 40	-	0.6	1.0	dB
	VSWR	F1-F2	30 - 40	-	1.2	1.5	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 19	30	40	-	dB
		F3-F4	19 - 21	20	27	-	dB
	VSWR	DC-F4	DC - 21	-	20	-	:1
Stop Band, Upper	Insertion Loss	F5-F6	60 - 65	20	30	-	dB
		F6-F7	65 - 1350	30	36	-	dB
	VSWR	F5-F7	60 - 1350	-	20	-	:1

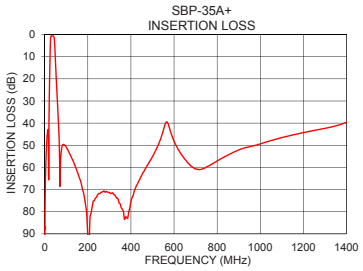
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W max.

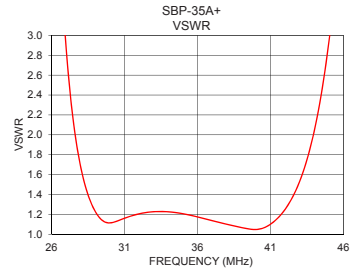
Permanent damage may occur if any of these limits are exceeded.

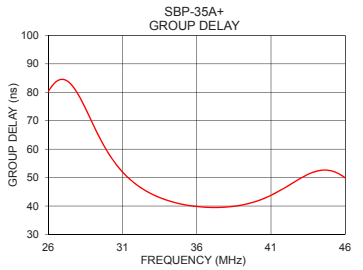
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)
1.00	87.83	220.19	30.0	58.99
10.00	47.53	326.39	30.5	55.11
19.00	48.78	106.38	31.0	51.95
20.75	31.40	78.66	31.5	49.39
21.00	29.77	74.84	32.0	47.27
22.50	21.17	50.76	32.5	45.55
26.50	3.43	4.07	33.0	44.14
30.00	0.64	1.11	33.5	42.97
35.00	0.59	1.21	34.0	42.02
40.00	0.66	1.05	34.5	41.24
45.50	3.29	3.59	35.0	40.62
53.75	20.35	45.87	35.5	40.17
58.75	30.01	78.77	36.0	39.82
60.00	32.38	85.47	36.5	39.59
65.00	42.66	109.66	37.0	39.49
100.00	50.88	163.76	37.5	39.50
500.00	55.12	66.32	38.0	39.63
600.00	48.17	34.38	38.5	39.90
1000.00	49.36	62.32	39.0	40.31
1350.00	41.26	45.16	40.0	41.64









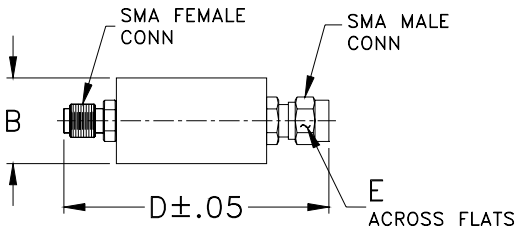
Notes

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

Coaxial Connections

PORT - 1	SMA-Male
PORT - 2	SMA-Female

Outline Drawing



Outline Dimensions (inch / mm)

B	D	E	Wt.
.70	**1.98**	**.312**	grams
17.78	50.29	7.92	42.0

Note: Please refer to case style drawing for details